Voluntary Remediation Program
Department of Environmental Management

Project Summary

Site Name:	Elkhart Products Corporation
Applicant Name:	Amcast Industrial/Elkhart Products Corp.
Site Location:	1255 Oak Street, Elkhart
VRP Site Number:	6960902
Project Manager:	Richard Harris
Date Application Received:	9/12/96
Date Project Completed:	1/29/08
Contaminant(s):	Select VOCs
Media Addressed:	Soil and Ground water
Cleanup Objectives Achieved:	VRP 1996 Tier II Nonresidential Default
Deed/Land-Use Restrictions:	Environmental Restrictive Covenants to prevent residential use or groundwater contact.

Project Summary: The decision to enter the Elkhart Products Corporation facility into the Voluntary Remediation Program came after discovery of soil and groundwater contamination beneath and adjacent to an area where solvent storage and transfer, spent-solvent drum storage, and solvent delivery occurred. During the history of plant operations, various quantities of trichloroethylene (TCE) and TCE-containing sludges were spilled in this area during routine operations and solvent deliveries. An investigation of the extent of the groundwater plume revealed that it extended off of the Elkhart Products property onto the adjacent parcel owned by Miles Laboratories.

After initial disclosure of TCE-impacted groundwater, untreated groundwater was discharged from a production well directly into the Elkhart sewer system from 1984 through 1988 according to an approved plan. Operation of a groundwater extraction and treatment system consisting of two recovery wells, dual air-stripping towers, and an infiltration gallery began operation in March 1988. A soil vapor extraction system using four vapor-extraction points began operation in August 1987. System operation, maintenance, and modification occurred as remediation progressed. An additional on-site recovery well began operation in April 1995. An infiltration pond was constructed in early 1995 to replace the infiltration gallery. In the fall of 1996, the dual air-stripping towers were replaced with a single air-stripping tower following eight and a half years of service.

The severity and extent of organic chemical contamination in the soil and groundwater were significantly reduced by the soil and groundwater remediation systems. Concentrations of TCE in groundwater decreased from a maximum of over 1200 micrograms per liter (ug/L) down gradient of the source area to on the order of 5.1 to 35 ug/L. The areal extent of the groundwater plume was also substantially reduced. TCE concentration in soil dropped from over 30 milligrams per kilogram (mg/kg) to a maximum of 6.6 mg/kg. It is estimated that over 435 gallons of TCE and over 100 gallons of other volatile organic chemicals were removed for the groundwater. The soil vapor extraction system is estimated to have removed over 230 gallons of TCE and related organics from the soil above the groundwater table.

Following many years of remedial activities, all soil and groundwater concentrations on the Elkhart Products property met the nonresidential default closure criteria. However, the plume extending offsite remained above the applicable residential closure criteria. In order to prevent exposure to affected media, Environmental Restrictive Covenants were placed on the Elkhart Products property and on the adjacent properties (the Miles property has been subdivided into parcels owned by Elkhart Equities, LLC; Feed the Children; and Bayer HealthCare, LLC). Copies of the Environmental Restrictive Covenants are attached to the Certificate of Completion in Exhibit 4.